

WHAT IS CLAIMED IS:

1. A method, comprising:
performing a topology discovery of a cluster that includes a plurality of ports;
identifying all the possible paths to each port from any other port;
receiving a request from a client, the request identifying a source and a destination of a
path; and
sending a response to the client based on the request, the response identifying one or more
links and switches between the source and the destination.

2. The method of claim 1, further comprising:
determining whether the request ought to be redirected.

3. The method of claim 2, further comprising:
sending a redirection address to the client if the request ought to be redirected.

4. The method of claim 3, further comprising:
submitting the request to the redirection address.

1 5. The method of claim 1, wherein:

2 the source and the path are each identified by a respective local identification value (LID).

1 6. The method of claim 1, wherein:

2 each switch is identified by a respective globally unique identifier (GUID), and each link
3 is identified by the port GUIDs of ports connected to both ends of the link.

1 7. The method of claim 1, wherein:

2 the response identifies an order in which the one or more links and switches are traversed
3 from the source to the destination.

1 8. A cluster, comprising:

2 a fabric of switches;

3 a plurality of ports on the fabric;

4 a service coupled to the fabric;

5 wherein the service is operative to send a response based on a request from a client;

6 wherein the request identifies a source and a destination of a path; and
7 wherein the response identifies one or more links and switches between the source and
8 the destination.

1 9. The cluster of claim 8, wherein:
2 the client is a host.

1 10. The cluster of claim 8, wherein:
2 the client is an I/O enclosure.

1 11. The cluster of claim 8, wherein:
2 the service is operative to determine whether the request ought to be redirected.

1 12. The cluster of claim 11, wherein:
2 if the request ought to be redirected, the service is operative to send a redirection address
3 to the client.

1 13. The cluster of claim 12, wherein:

2 the request is submitted to the redirection address.

1 14. The cluster of claim 8, wherein:

2 the response identifies an order in which the one or more links and switches are traversed
3 from the source to the destination.

1 15. The cluster of claim 8, wherein:

2 the service is operative to identify all the possible paths to each port from any other port.

1 16. A computer readable medium having stored thereon instructions which, when
2 executed by a processor, cause the processor to perform a method, said method comprising:
3 performing a topology discovery of a cluster that includes a plurality of ports;
4 identifying all the possible paths to each port from any other port;
5 receiving a request from a client, the request identifying a source and a destination of a
6 path; and

7 sending a response to the client based on the request, the response identifying one or more
8 links and switches between the source and the destination.

1 17. The computer readable medium of claim 16, said method further comprising:
2 determining whether the request ought to be redirected.

1 18. The computer readable medium of claim 17, said method further comprising:
2 sending a redirection address to the client if the request ought to be redirected.

1 19. The computer readable medium of claim 18, said method further comprising:
2 submitting the request to the redirection address.

1 20. The computer readable medium of claim 16, wherein:
2 the source and the path are each identified by a respective local identification value (LID).

1 21. The computer readable medium of claim 16, wherein:

2 each switch is identified by a respective globally unique identifier (GUID), and each link
3 is identified by the port GUIDs of ports connected to both ends of the link.

1 22. The computer readable medium of claim 16, wherein:
2 the response identifies an order in which the one or more switches are traversed from the
3 source to the destination.